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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/598,687	05/29/2007	Jos Kobussen	P07033US0	8984

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EXAMINER

WILLIAMS, LUANA

ART UNIT	PAPER NUMBER
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1794

MAIL DATE	DELIVERY MODE
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11/24/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/598,687	Applicant(s) KOBUSSEN ET AL.	
	Examiner LUANA Z. WILLIAMS	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 14-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-17 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 1-13 in the reply filed on July 29, 2009 is acknowledged. Claims 14-17 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Group II, there being no allowable generic or linking claim.

Response to Amendment

2. The Amendment filed in the Applicant's response filed on July 29, 2009 is acknowledged. Claim objections for amended claims 1-13 are withdrawn.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 5, 9-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Regarding claim 5, the phrase "for instance" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

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6. Claims 9-10 recite the limitation "the strong oxidant" in line 2 of each claim.

Claims 9-10 refer to cancelled claim matter in claim 8. There is no longer antecedent basis for this limitation in the claims.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

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consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobussen et al. [US patent 6245369] (hereinafter Kobussen) in view of Sanderson et al. [US patent 5783237] (hereinafter Sanderson) and Ricklefs et al. [US patent 5632153] (hereinafter Ricklefs).

11. Referring to claims 1-2, Kobussen discloses a method wherein sausage strands are coextruded onto a belt or conveyor and carried through a brine shower system (column 4, line 9-10 and column 3, line 1-4). The brine shower system includes a brine tank which is connected to a brine collection tray (column 4, line 20-23) and "a plurality of the nozzles which spray a quantity of brine on the moving sausage strand (Kobussen; column 4, line 39-41)." The excess brine from the nozzles flows downwardly into the brine collection tray, and thence into the brine tank wherein the excess brine is recirculated through the system (column 4, line 39-41). Examiner notes that it is inherent that the process of Kobussen "at least partially dehydrates the casing of co-extruded food products," since water migrates out of sausage casings that are exposed to brine through osmosis.

12. Kobussen discloses most of the instant claim, however, is silent to reconditioning the collected brine (aqueous salt solution), such that it comprises forced evaporation of water out of the brine by heating the brine, prior to recirculating the brine through the system.

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13. Sanderson discloses a process for the recovery and reuse of a salt solution during processing of various foods products such as cheese (col. 1; line 5-7). The process therein includes spraying brine onto food conveyed on a belt, wherein the excess brine is collected into a tank and evaporated of excess water, and then reused as a salt solution (col. 2, lines 18-20 and col. 3, lines 56-57). Sanderson also discloses heat control means connected to the evaporator (col. 2, lines 21-25), suggesting that the evaporation of water out of the salt solution is done by heating.

14. Ricklefs discloses that it was known in the art to clean and recondition brine (col. 1, lines 64-67) used for spraying sausages (col. 3, lines 8-16).

15. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to add the step of reconditioning the brine collected by forced evaporation of water out of the brine, as disclosed by Sanderson, to the process of Kobussen, with the motivation of achieving a more efficient recycling and reuse of the brine. It would also have been obvious to one of ordinary skill in the art at the time of the invention to evaporate the excess water by heating the brine solution with heat control means, as suggested by Sanderson.

16. Regarding claims 3-4, Kobussen does not disclose that its collected aqueous salt solution is filtered, and that it's filtered in a manner such that at least one component is substantially removed from the aqueous salt solution by means of absorption.

17. Ricklefs discloses that its brine is processed through a filtration unit (col. 4, lines 54-56) where the brine is filtered in a manner such that at least one component

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(contaminants) is substantially removed from the brine by means of absorption (low-pressure membrane process) (col. 4, line 61 to col. 5, line 4).

18. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the process of Kobussen so that its brine solution is filtered by means of absorption, such as by using the low-pressure membrane process of Ricklefs. One of ordinary skill in the art at the time of the invention would be motivated to do this so to allow the reuse of the same brine for an extended period of time, thus dramatically reducing or eliminating the amount of brine that needs to be disposed at the end of each operational cycle (Ricklefs, col. 5, lines 37-41).

19. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kobussen in view of Sanderson and Ricklefs, in further view of Erskine [US 3,444,078].

20. Kobussen in view of Sanderson and Ricklefs is relied upon from above for rejecting claims 1 and 3.

21. Kobussen in view of Sanderson and Ricklefs does not disclose that its collected aqueous salt solution is filtered in a manner such that at least one component is substantially removed from the aqueous salt solution by means of *adsorption*.

22. However, filtration of liquids by adsorption is well known in the art. For example, Erskine discloses the purification of water with activated carbon through adsorption of impurities (col. 1, lines 20-21, 35-41 and col. 2, lines 51-53).

23. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the process of Kobussen in view of Sanderson and Ricklefs so that

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the brine solution is filtered by active carbon adsorption, such as disclosed by Erskine.

One of ordinary skill in the art at the time of the invention would be motivated to do this so as to remove impurities from the brine solution that cause disagreeable tastes, odors and turbidity (Erskine, col. 1, lines 29-30).

24. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobussen in view of Sanderson and Ricklefs, in further view of Keil et al. [US 3,073,702] (hereinafter Keil).

25. Kobussen in view of Sanderson and Ricklefs is relied upon from above for rejecting claim 1.

26. Regarding claims 6-8, Kobussen in view of Sanderson and Ricklefs does not disclose adding hydrogen peroxide to the aqueous salt solution to prevent or at least partially reverse discoloration.

27. Keil discloses using hydrogen peroxide as a conditioning agent for treating collagenous material (col. 2, lines 43-44). Keil also discloses that hydrogen peroxide has the advantage of having bacteriocidal properties (col. 3, lines 7-13).

28. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to add hydrogen peroxide to the aqueous salt solution of Kobussen in view of Sanderson and Ricklefs, either before or after the reconditioning step, with the expected result of preventing or reversing discoloration. One of ordinary skill in the art at the time of the invention would be motivated to add hydrogen peroxide due to its disinfecting properties (Keil, col. 3, lines 7-13).

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29. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kobussen in view of Sanderson, Ricklefs, and Keil, in further view of Hignett et al. [US 4,536,313] (hereinafter Hignett).

30. Kobussen in view of Sanderson, Ricklefs, and Keil is relied upon from above for rejecting claim 8.

31. Kobussen in view of Sanderson, Ricklefs, and Keil does not disclose adding sodium percarbonate to its aqueous salt solution.

32. However, Hignett discloses that sodium percarbonate, which generates hydrogen peroxide in aqueous solution, can also be used as a disinfectant (col. 1, lines 10-18).

33. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to add sodium percarbonate to the brine of Modified Kobussen, or to substitute the hydrogen peroxide of Modified Kobussen with sodium percarbonate, with the motivation of using it as a disinfectant.

34. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kobussen in view of Sanderson, Ricklefs, and Keil, in further view of Barber et al. [US 2003/0183092] (hereinafter Barber).

35. Kobussen in view of Sanderson, Ricklefs, and Keil is relied upon from above for rejecting claim 8.

36. Kobussen in view of Sanderson, Ricklefs, and Keil does not disclose adding a strong oxidant consisting of an acid derivative to its aqueous salt solution.

37. Barber discloses a process wherein a brine solution is treated with a micro biocide, filtered and then reused in a brine bath tank (abstract and [0031]). Barber

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discloses that the micro biocide is peroxy acetic acid (also known as peracetic acid) ([0029]), which is an acid derivative disclosed by the Applicant (See Spec, page 4, para 1).

38. It would have been obvious to one of ordinary skill in the art at the time of the invention to add the peroxy acetic acid of Barber to the brine of Modified Kobussen, with the motivation of avoiding the growth of bacterial and other microbes in the brine (Barber, [0029]).

39. **Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobussen in view of Sanderson and Ricklefs, in further view of Riordan [US 4,094,237].**

40. Kobussen in view of Sanderson and Ricklefs is relied upon from above for rejecting claim 1.

41. Regarding claims 11-13, Kobussen in view of Sanderson and Ricklefs does not disclose irradiating the aqueous salt solution with ultraviolet radiation in order to at least substantially prevent or reverse discoloration of the salt solution.

42. Riordan discloses a method for purifying bacterially-contaminated brine overflow by passing the brine through a series of ultra-violet liquid purifying devices (see abstract and col. 1, lines 27-34).

43. It would have been obvious to one of ordinary skill in the art at the time of the invention to add the step of irradiating the aqueous salt solution of Modified Kobussen with ultraviolet radiation, such as disclosed by Riordan, with the expected result of preventing or reversing discoloration of the salt solution. One of ordinary skill in the art

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at the time of the invention would be motivated to do this in order to decrease bacterial contamination of the salt solution (Riordan, col. 2, lines 60-64).

Response to Arguments

44. Applicant's arguments with respect to claims 1-13 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

45. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LUANA Z. WILLIAMS whose telephone number is 571-270-1152. The examiner can normally be reached on 8:30 AM - 5:00 PM.

46. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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47. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/L. Z. W./
Examiner, Art Unit 1794
11/16/2009

/Rena L. Dye/
Supervisory Patent Examiner, Art Unit 1794